# **Document Log Item**

Addressing			
From		То	
Nancy Rumrill/R9/USEPA/US		Michele Dermer/R9/USEPA/US@EPA	
сс		BCC	
R9-Deep			
Description			Form Used: Reply
Subject		Date/Time	
Re: Fw: Additional Information requested - MINI FRAC		07/06/2010 10:48 AM	
INJECTIVITY TEST			
# of Attachments	Total Bytes	NPM	Contributor
0	10,045		
Processing			
Comments			

## Body

## **Document Body**

# Nancy

Nancy Rumrill U.S. Environmental Protection Agency, Region 9 Ground Water Office, WTR-9 75 Hawthorne Street San Francisco, CA 94105

## 415-972-3293 415-947-3545 (FAX)

### Michele Dermer---07/02/2010 04:06:11 PM---Dear Team,

From: Michele Dermer/R9/USEPA/US

To: R9-Deep

Date: 07/02/2010 04:06 PM

Subject: Fw: Additional Information requested - MINI FRAC INJECTIVITY TEST

### Dear Team,

Michele

---- Forwarded by Michele Dermer/R9/USEPA/US on 07/02/2010 03:45 PM -----

From: <Damonica.Pierson@Shell.com>
To: Michele Dermer/R9/USEPA/US@EPA

Cc: David Albright/R9/USEPA/US@EPA, George Robin/R9/USEPA/US@EPA

Date: 06/29/2010 02:47 PM

Michele, we (C6) have used the terms 'mini-frac' and 'mini-injectivity' interchangeably, which breeds a bit of confusion. We do plan on conducting a mini-frac injection test that will involve fracturing. The description of the mini-frac injectivity test is the same as what is described in the mini-injectivity excerpt that you included in the email below. I have attached a red-line version of this attachment that changes the name of the test to mini-frac injectivity. Other references to this test will need to be updated in the permit as well. Please also take a look at the mini-frac testing protocol described in the following link from EPA Region 5. My apologies if you have already seen this, but our subsurface team would like to point out that the test description here is the same as what we are proposing.

http://www.epa.gov/r5water/uic/r5guid/r5 06dr.htm -----Original Message-----

**From:** Dermer.Michele@epamail.epa.gov [mailto:Dermer.Michele@epamail.epa.gov]

**Sent:** Thursday, June 24, 2010 2:49 PM

To: Pierson, Damonica M SEPCO-UAS/E/C

**Cc:** Albright.David@epamail.epa.gov; Robin.George@epamail.epa.gov

**Subject:** Additional Information requested

Hi DaMonica,

We are continuing to review C6's proposal for the mini injectivity test. There seems to be a possible discrepancy when we compare the write up recently submitted (word file attached) and the information contained in Attachment I of your permit application (.pdf file attached).

The application contemplates a mini-frac **and** a mini injectivity test - with fracturing the formation a part of the mini-frac test only. The mini injectivity test write up in Attachment I of the application does not include fracturing, however the recent write up provided for the mini injectivity test **does** indicate that fracturing is a part of this test. Further, the technical literature provided to us describes mini-frac tests.

We would appreciate receiving some clarification from you on this proposed test - can you please provide EPA with a written description of the test that is being contemplated to include the stated purpose and a clear explanation of the test procedure. We do not need the step by step details, but clarification of the purpose/justification; the need to fracture, clarification of low rate and low pressure vs. high rate and high pressure, and so forth, would be very helpful.

Sincerely,

Michele [attachment "Mini Injectivity Test\_C6 Edit.docx" deleted by Nancy Rumrill/R9/USEPA/US]